

CLAIMS

1. A machine tool facility equipped with a pallet exchanger for automatically exchanging pallets mounted on a table or on a pallet-mounting plate, comprising:

5 a machine tool having a main spindle supported to rotate about a horizontal axis and for mounting a tool on the front end thereof, and a table or a pallet-mounting plate facing the front surface of the main spindle and for detachably attaching a pallet to a vertical surface, the machine tool being designed to machine the work fixed to the pallet; and

10 a pallet exchanger having a base provided neighboring the table or the pallet-mounting plate and serving as a base plate for the pallet exchanger, a pallet support member provided on the base so as to rotate about a vertical axis thereof in an indexing manner, having at least two vertical pallet-mounting surfaces and detachably mounting the pallet, and pallet-moving means for moving the pallet, in a vertical state, 15 between the table or the pallet-mounting plate and the pallet support member to exchange the pallets.

2. The machine tool facility as set forth in claim 1, wherein the pallet support member of the pallet exchanger is disposed at a position on an extension of the table or the pallet-mounting plate in a horizontal direction at right angles with the axis of the main spindle, and the pallet-mounting surface of the pallet support member on the pallet moving side is constituted to be in parallel with the pallet-mounting surface of the 20 table or the pallet-mounting plate.

3. The machine tool facility as set forth in claim 1 or 2, further comprising at least one pallet stocker provided near the pallet exchanger to detachably hold the pallet in a vertical state, and to move the pallet in a 25 vertical state by using the pallet-moving means in the radial direction of the rotary circle of the pallet support member so as to exchange the pallet relative to

the pallet support member.

4. The machine tool facility as set forth in claim
1, wherein the base of the pallet exchanger travels on a
track laid in a horizontal direction at right angles with
5 the pallet-mounting surface of the table or the pallet-
mounting plate, at least one pallet stocker detachably
holding the pallets in the vertical state is disposed
near the track and, after the pallet support member and
the pallet stocker are aligned with each other, the
pallet is moved in the vertical state and is exchanged
10 between the pallet support member and the pallet stocker
by the pallet-moving means.

15 5. The machine tool facility as set forth in claim
4, wherein a plurality of machine tools are arranged on
one side or on both sides of the track, and the pallets
are moved in the vertical state and are exchanged between
a plurality of pallet stockers and the plurality of
machine tools by the pallet exchanger traveling on the
track.

20 6. The machine tool facility as set forth in claim
1, wherein the pallet exchanger can be mounted on either
a fixed-type base with which the pallet support member
and the pallet-moving means are used by being fixed onto
the floor, or on a traveling-type base and the pallet
support member and the pallet-moving means are used while
traveling on the track.